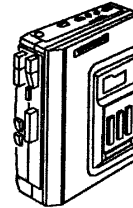


AIWA®

SERVICE MANUAL

HS-T40/T40A HS-T30/T30A HS-T28 HS-RD7/RD7A



HS - T30

STEREO RADIO CASSETTE PLAYER

• BASIC TAPE MECHANISM : α - 1MK II

• TYPE. Y, YZ (T40/T30/T28/RD7)
YU (T40A/T30A/RD7A)

SPECIFICATIONS

Frequency range:

FM: 87.5—108 MHz

AM: 530—1705 kHz (U.S.A. model)

530—1605 kHz (Other models)

Maximum output:

20mW + 20mW (EIAJ/16 Ω)

15mW + 15mW (EIAJ/32 Ω)

Power source:

Battery DC 3V, R6P (LR6, SUM-3,
AA) \times 2

Domestic AC power (using optional
AC adaptor: AIWA AC-620)

Battery life:

Using manganese batteries (R6P,
SUM-3, AA)

Approx. 5 hours (EIAJ, 1 mW
output, playback mode)

Using alkaline batteries (LR6,
AM-3, AA)

Approx. 10 hours (EIAJ, 1 mW
output, playback mode)

Maximum dimensions (W \times H \times D):

HS-T28/T30/T30A/RD7/RD7A:

92 \times 120.5 \times 37.5 mm

HS-T40/T40A: 92 \times 120.5 \times 38 mm

Weight: 265g (including batteries)

- Design and specifications are subject to change without notice.
- Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
- "Dolby", the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
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AIWA Co., Ltd.

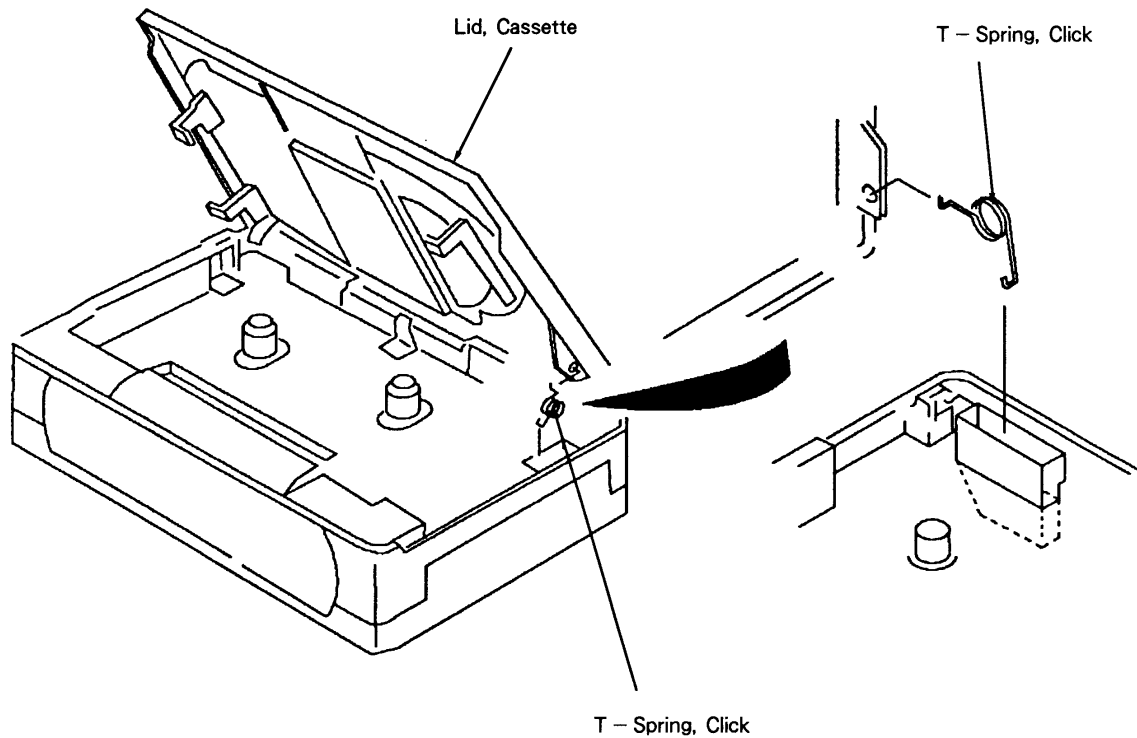
Tokyo Japan

Printed in Japan

DISASSEMBLY INSTRUCTIONS

To hook the Spring to the "Lid, Cassette"

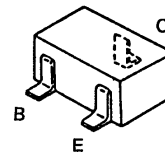
- 1) When reinstalling hook the "T - Spring, Click" as shown in the figure.



PRACTICAL SERVICE FIGURE

< RADIO SECTION >

Sensitivity :	FM	14 ± 5dB (88MHz)
(IHF THD 3%)		12 ± 5dB
		(100/108MHz)
(S/N 10dB)	AM	55 ± 4dB
		(Y,YZ 600kHz
		YU 630kHz)
		52 ± 4dB
		(1000kHz)
		51 ± 4dB
		(Y,YZ 1400kHz
		YU 1500kHz)
Intermediate frequency :	FM	10.7 ± 0.1MHz
	AM	468kHz ± 3kHz
FM stereo separation :	FM	20 ± 4dB



2SA1296
2SC2712
2SC2714
RN1411
RN2407

< TAPE PLAYER SECTION >

Wow & flutter :	Less than 0.48 % (JIS,RMS)
Pinch roller pressure :	180 ± 20g
Take-up torque :	25~45g-cm (FWD/REV)
F.F & Rew torque :	120 ± 25g-cm
Back tension :	2.5 ± 1g-cm (FWD/REV)
S/N ratio :	46 ± 3dB (DC) (T40/T40A)
	More than 43dB
	(DC) (T30/T30A/
	T28/RD7/RD7A)
Distortion :	Less than 3.0%
Noise level :	Less than 4.0mV (VOL MAX AC)
Frequency response :	63Hz~8kHz ± 4.5dB (NORMAL)
	63Hz~10kHz ± 4.5dB
	(CrO2, METAL)

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
=== IC ===					
	87-001-351-019	IC,AN6612S	C21	*87-010-193-019	CAP,CHIP S 0.033-25 F(T30)
	87-001-934-019	IC,BA1106F(T30/T40)	C22	*87-010-452-019	CAP,CHIP 1-16 F(T40)
	87-001-935-010	IC,LA4581M	C22	*87-010-493-019	CAP,ELECT 0.47-50 GAS(T28/RD7)
	87-001-379-019	IC,TA8122AF	C22	*87-010-193-019	CAP,CHIP S 0.033-25 F(T30)
=== TRANSISTOR ===					
	89-112-964-019	TRANSISTOR,2SA1296Y	C23	*87-010-186-019	CAP,CHIP S 4700P-50 B(T40)
	89-327-125-019	TRANSISTOR,2SC2712GR	C23	*87-010-196-019	CAP,CHIP S 0.1-25 F(T30)
	89-327-143-019	TRANSISTOR,2SC2714(O)	C24	*87-010-186-019	CAP,CHIP S 4700P-50 B(T40)
	87-026-264-019	TRANSISTOR,RN1411(T30/T40)	C24	*87-010-196-019	CAP,CHIP S 0.1-25 F(T30)
	87-026-267-019	TRANSISTOR,RN2407	C25	*87-010-193-019	CAP,CHIP S 0.033-25 F(T40)
			C25	*87-010-452-019	CAP,CHIP S 1-16 F(T30)
			C26	*87-010-193-019	CAP,CHIP S 0.033-25 F(T40)
			C26	*87-010-452-019	CAP,CHIP S 1-16 F(T30)
=== DIODE ===					
	87-020-027-019	DIODE,1SS184(T28/RD7)	C27	*87-010-197-019	CAP,CHIP S 0.01 B(T40)
	87-020-339-019	DIODE,CHIP 1SS226	C27	*87-010-503-019	CAP,ELECT 220-4 GAS(T30)
			C28	*87-010-197-019	CAP,CHIP S 0.01 B(T40)
			C28	*87-010-501-019	CAP,ELECT 47-4 GAS(T30)
=== MAIN CIRCUIT BOARD SECTION ===					
BPF201	87-030-136-010	FILTER,BPMB8L7.0	C29	*87-010-193-019	CAP,CHIP S 0.033-25 F(T40)
C1	*87-010-177-019	CAP,CHIP S 820P-50 SL	C29	*87-010-197-019	CAP,CHIP S 0.01 B(T30)
C2	*87-010-177-019	CAP,CHIP S 820P-50 SL	C30	*87-010-193-019	CAP,CHIP S 0.033-25 F(T40)
C3	*87-010-501-019	CAP,ELECT 47-4 GAS(T30/T40)	C30	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T30)
C3	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T28/RD7)	C31	*87-010-196-019	CAP,CHIP S 0.1-25 F(T40)
C4	*87-010-501-019	CAP,ELECT 47-4 GAS(T30/T40)	C31	*87-010-498-019	CAP,ELECT 10-16 GAS(T30)
C4	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T28/RD7)	C32	*87-010-196-019	CAP,CHIP S 0.1-25 F(T40)
C5	*87-010-426-019	CAP,CHIP S 0.012-25 B(T30/T40)	C32	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T30)
C5	*87-010-186-019	CAP,CHIP S 4700P-50 B(T28/RD7)	C33	*87-010-503-019	CAP,ELECT 220-4 GAS(T30/T40)
C6	*87-010-426-019	CAP,CHIP S 0.012-25 B(T30/T40)	C34	*87-010-501-019	CAP,ELECT 47-4 GAS(T40)
C6	*87-010-186-019	CAP,CHIP S 4700P-50 B(T28/RD7)	C34	*87-010-495-019	CAP,ELECT 2.2-50 GAS(T30)
C7	*87-010-426-019	CAP,CHIP S 0.012-25 B(T30/T40)	C35	*87-010-452-019	CAP,CHIP 1-16 F(T40)
C7	*87-012-141-019	CAP,CHIP S 0.022-16 F(T28/RD7)	C35	*87-010-493-019	CAP,ELECT 0.47-50 GAS(T30)
C8	*87-010-426-019	CAP,CHIP S 0.012-25 B	C36	*87-010-452-019	CAP,CHIP 1-16 F(T40)
C8	*87-012-141-019	CAP,CHIP S 0.22-16 F(T28/RD7)	C36	*87-010-494-019	CAP,ELECT 1-50 GAS(T30)
C9	*87-010-179-019	CAP,CHIP S 1200P-50 B	C37	*87-010-196-019	CAP,CHIP S 0.1-25 F(T40)
C10	*87-010-179-019	CAP,CHIP S 1200P-50 B	C38	*87-010-196-019	CAP,CHIP S 0.1-25 F(T40)
C11	*87-012-141-019	CAP,CHIP S 0.22-16 F(T30/T40)	C39	*87-010-493-019	CAP,ELECT 0.47-50 GAS(T40)
C11	*87-010-452-019	CAP,CHIP S 1-16 F(T28/RD7)	C40	*87-010-494-019	CAP,ELECT 1-50 GAS(T40)
C12	*87-012-141-019	CAP,CHIP S 0.22-16 F(T30/T40)	C201	*87-010-315-019	CAP,CHIP S 27P-50 CH
C12	*87-010-452-019	CAP,CHIP 1-16 F(T28)	C202	*87-010-315-019	CAP,CHIP S 27P-50 CH
C13	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T40)	C203	*87-010-197-019	CAP,CHIP S 0.01 B
C13	*87-010-494-019	CAP,ELECT 1-50 GAS(T28/RD7)	C204	*87-010-314-019	CAP,CHIP S 22P-50 CH(T40)
C13	*87-010-452-019	CAP,CHIP 1-16 F(T30)	C204	*87-010-312-019	CAP,CHIP S 15P CH(T30/T28/RD7)
C14	*87-010-197-019	CAP,CHIP S 0.01 B(T28/RD7/T40)	C205	*87-010-452-019	CAP,CHIP 1-16 F
C14	*87-010-452-019	CAP,CHIP 1-16 F(T30)	C206	*87-010-197-019	CAP,CHIP S 0.01 B
C15	*87-010-495-019	CAP,ELECT 2.2-50 GAS(T40)	C207	*87-010-154-019	CAP,CHIP S 10P CH(EXCEPT U)
C15	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T28/RD7)	C207	*87-010-150-019	CAP,CHIP S 6P CH(U ONLY)
C15	*87-010-193-019	CAP,CHIP S 0.033-25 F(T30)	C208	*87-010-197-019	CAP,CHIP S 0.01 B
C16	*87-010-501-019	CAP,ELECT 47-4 GAS(T28/RD7/T40)	C209	*87-012-140-019	CAP,CHIP S 470P-50 CH
C16	*87-010-193-019	CAP,CHIP S 0.033-25 F(T30)	C210	*87-010-452-019	CAP,CHIP 1-16 F
C17	*87-010-499-019	CAP,ELECT 22-6.3 GAS(T40)	C211	*87-010-196-019	CAP,CHIP S 0.1-25 F
C17	*87-010-503-019	CAP,ELECT 220-4 GAS(T28/RD7)	C212	*87-010-195-019	CAP,CHIP S 0.068-25 F
C17	*87-010-186-019	CAP,CHIP S 4700P-50 B(T30)	C213	*87-010-196-019	CAP,CHIP S 0.1-25 F
C18	*87-010-503-019	CAP,ELECT 220-4 GAS(T40)	C214	*87-010-501-019	CAP,ELECT 47-4 GAS
C18	*87-010-495-019	CAP,ELECT 2.5-50 GAS(T28/RD7)	C215	*87-015-834-019	CAP,CHIP S 0.033-25
C18	*87-010-186-019	CAP,CHIP S 4700P-50 B(T30)	C216	*87-010-322-019	CAP,CHIP S 100P CH
C19	*87-010-452-019	CAP,CHIP 1-16 F(T40)	C217	*87-010-197-019	CAP,CHIP S 0.01 B
C19	*87-010-193-019	CAP,CHIP S 0.033-25 F(T28/RD7)	C218	*87-010-195-019	CAP,CHIP S 0.068-25 F
C19	*87-010-197-019	CAP,CHIP S 0.01 B(T30)	C219	*87-010-196-019	CAP,CHIP S 0.1-25 F
C20	*87-010-496-019	CAP,ELECT 3.3-50 GAS(T40)	C220	*87-010-184-019	CAP,CHIP S 3300P-50 B(T30/T40)
C20	*87-010-193-019	CAP,CHIP S 0.033-25 F(T28/RD7)	C220	*87-010-503-019	CAP,ELECT 220-4 GAS(T28/RD7)
C20	*87-010-197-019	CAP,CHIP S 0.01 B(T30)	C221	*87-010-452-019	CAP,CHIP 1-16 F
C21	*87-010-452-019	CAP,CHIP 1-16 F(T40)	C222	*87-010-452-019	CAP,CHIP 1-16 F
C21	*87-010-494-019	CAP,ELECT 1-50 GAS(T28/RD7)	C223	*87-010-191-019	CAP,CHIP S 0.015-50 F(T30/T40)
			C223	*87-010-177-019	CAP,CHIP S 820P-50 SL(T28/RD7)
			C224	*87-010-191-019	CAP,CHIP S 0.015-50 F(T30/T40)
			C224	*87-018-177-019	CAP,CHIP S 820P-50 SL(T28/RD7)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
C225	*87-010-178-019	CAP,CHIP S 1000P-50 B	S4	87-036-109-019	PUSH SW(PLAY)(T28/RD7)
C226	*87-010-318-019	CAP,CHIP S 47P-50 CH	S5	87-036-109-019	PUSH SW(PLAY)(T30/T40)
C227	*87-010-149-019	CAP,CHIP S 5P-50 CH(EXCEPT U)	S201	87-036-021-010	SLIDE SW(BAND)
C227	*87-010-145-019	CAP,CHIP S 1P CH(U ONLY)	SFR1	*87-024-197-019	SFR,1K
C228	*87-010-503-019	CAP,ELECT 220-4 GAS(T30/T40)	SFR2	*87-024-197-019	SFR,1K(T30/T40)
C228	*87-010-318-019	CAP,CHIP S 47P-50 CH(T28/RD7)	SFR3	*87-024-050-019	SFR,1K(T30/T40)
C229	*87-010-318-019	CAP,CHIP S 47P-50 CH(T30/T40)	TH1	87-026-256-010	THERMIST,HT-100
CF201	87-008-444-019	FILTER,KIT FM 5RANK	VC201	87-011-231-019	TUN-CAP,5.5-20P(TUNING)
CF203	+++	FILTER,KIT FM 5RANK	VC202	+++	TUN-CAP,5.5-20P(TUNING)
CF204	87-008-284-019	FILTER,PFB 468J	VC203	+++	TUN-CAP,5.5-20P(TUNING)
CF204	87-030-200-019	RESONATER,CERAMIC CSB 456 F16	VC204	+++	TUN-CAP,5.5-20P(TUNING)
D2	87-020-520-019	LED,TLR226(OP/BAT)	TC201	+++	TUN-CAP,5.5-20P
D3	87-020-520-019	LED,TLR226(OP/BAT)(T40)	TC202	+++	TUN-CAP,5.5-20P
J1	87-049-861-019	JACK,3.5 ST(PHONES)	TC203	+++	TUN-CAP,5.5-20P
J2	87-009-022-019	DC JACK LONG(DC3V)	TC204	+++	TUN-CAP,5.5-20P
L1	*87-003-143-019	COIL,4.7UH	VR1	87-024-326-019	VR,20KAX2(VOLUME)
L2	*87-003-142-019	COIL,CHOKE 3.3UH	--- BBE CIRCUIT BOARD SECTION(HS-T40) ---		
L3	*87-003-141-019	COIL,CHOKE 1.2UH	80-HR6-601-010 BBE ASSY(W/PCB-B)		
L4	*87-003-089-019	COIL,47UH	--- HEAD CIRCUIT BOARD SECTION ---		
L201	*80-HJ6-603-019	COIL,RF FM	87-046-346-019 PH ASSY(W/PCB-C)		
L202	*80-HJ6-604-019	COIL,OSC FM	87-033-219-019 FLEXIBLE CIRCUIT BOARD		
L203	*80-HJ6-602-019	COIL,BAR-ANTENNA AM	PH1 87-046-333-019 P HEAD		
L204	*87-007-276-019	COIL,OSC AM	S1 86-567-601-019 SLIDE SWITCH(FWD/REV)		
L205	87-008-447-019	IFT,AM	--- GEQ CIRCUIT BOARD SECTION(HS-T30/T28/RD7) ---		
L206	*80-HJ6-605-019	COIL,LOADING	84-479-601-019 GEQ ASSY(W/PCB-D)		
R23	87-025-433-019	RES,PTR 0.51-4300 PPM (T28/RD7)	--- MISCELLANEOUS ---		
R28	87-025-433-019	RES,PTR 0.51-4300 PPM (T30)	M1 87-045-300-019 MOTOR(BDH3B)		
R40	87-025-433-019	RES,PTR 0.51-4300 PPM (T40)			
S2	87-036-204-010	SLIDE SW(TAPE/FM MODE)			
S3	87-036-204-010	SLIDE SW(DOLBY NR)(T30/T40)			
S3	87-036-020-010	SLIDE SW(FUNCTION)(T28/RD7)			
S4	87-036-020-010	SLIDE SW(FUNCTION)(T30/T40)			

NOTE :

T40 = HS - T40/T40A

T30 = HS - T30/T30A

T28 = HS - T28

RD7 = HS - RD7/RD7A

EXCEPT U = HS - T40/T30/T28/RD7

U ONLY = HS - T40A/T30A/RD7A

○チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip resistor part coding

8 8 - □ □ □ □ - □ □ □

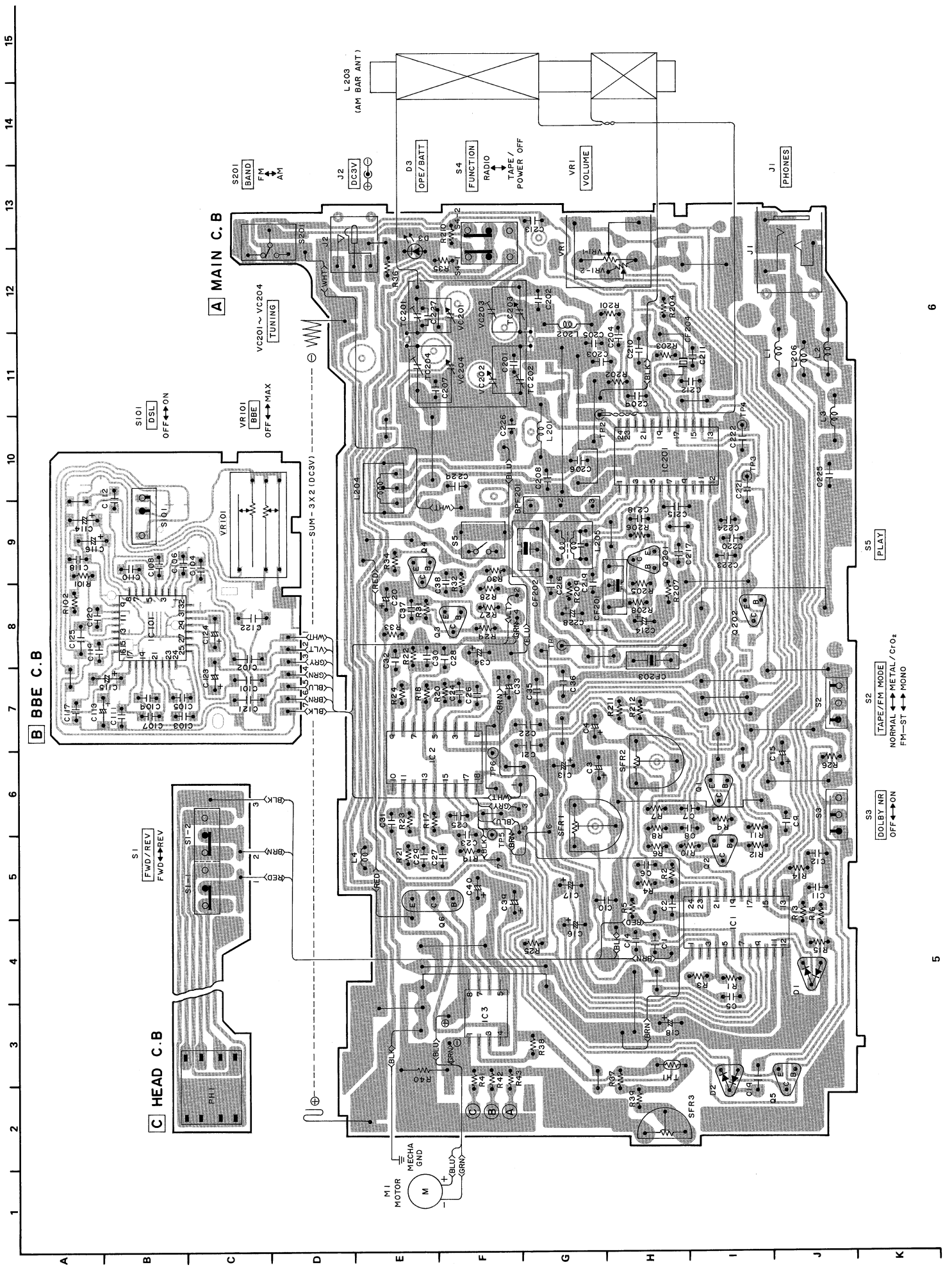
A
抵抗コード
Resistor code

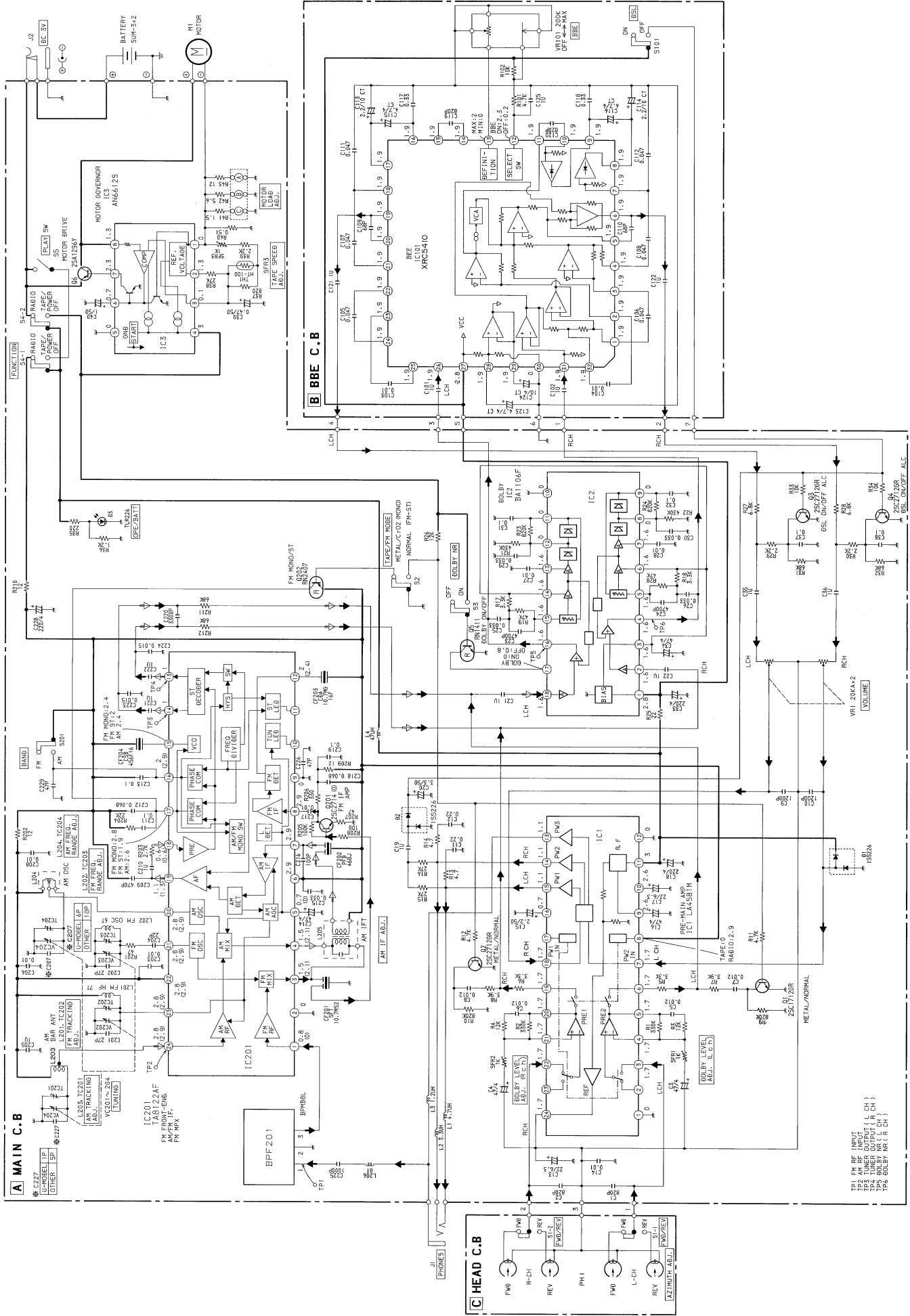
桁表示
Figure

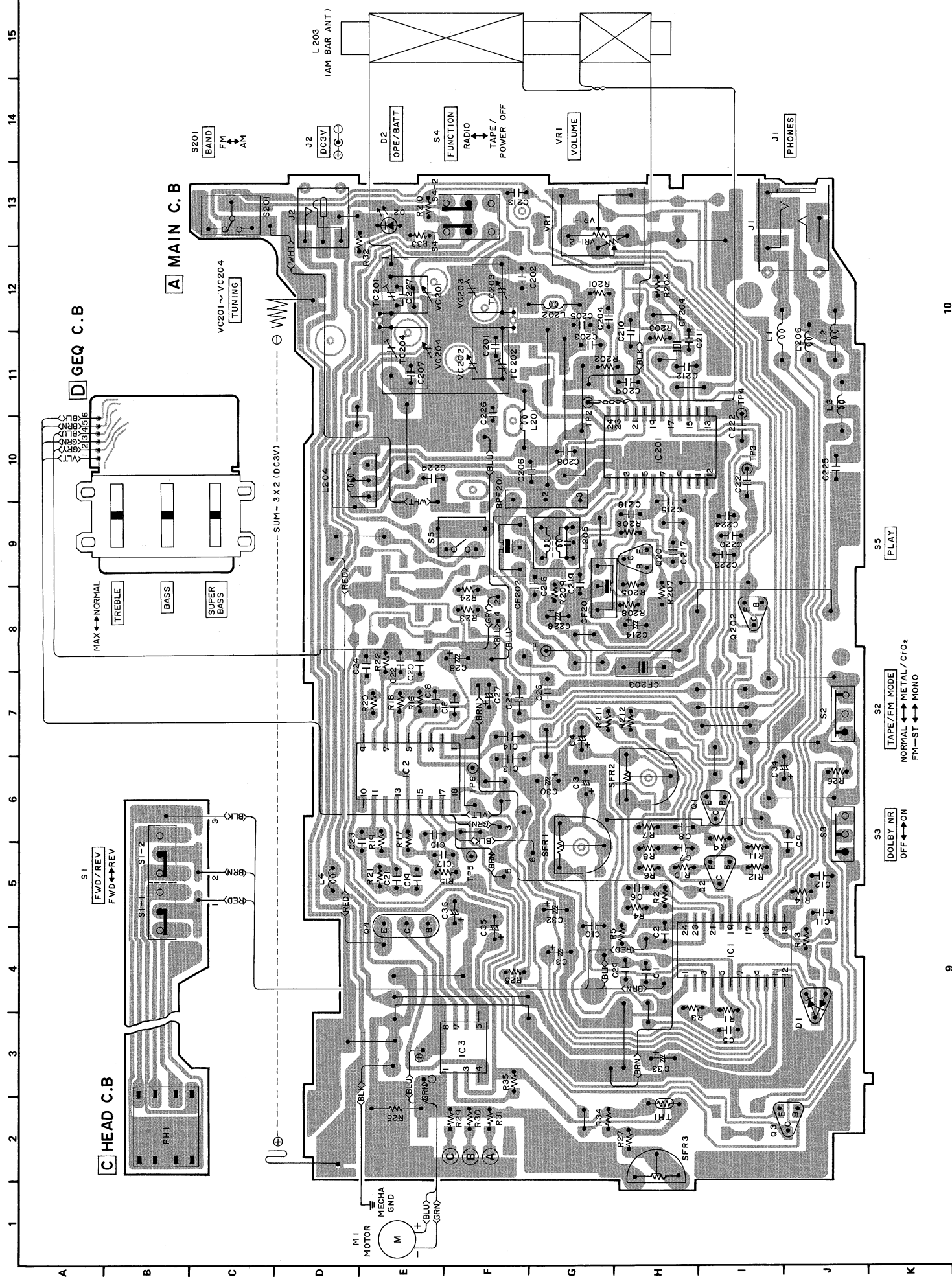
抵抗値
Value of resistor

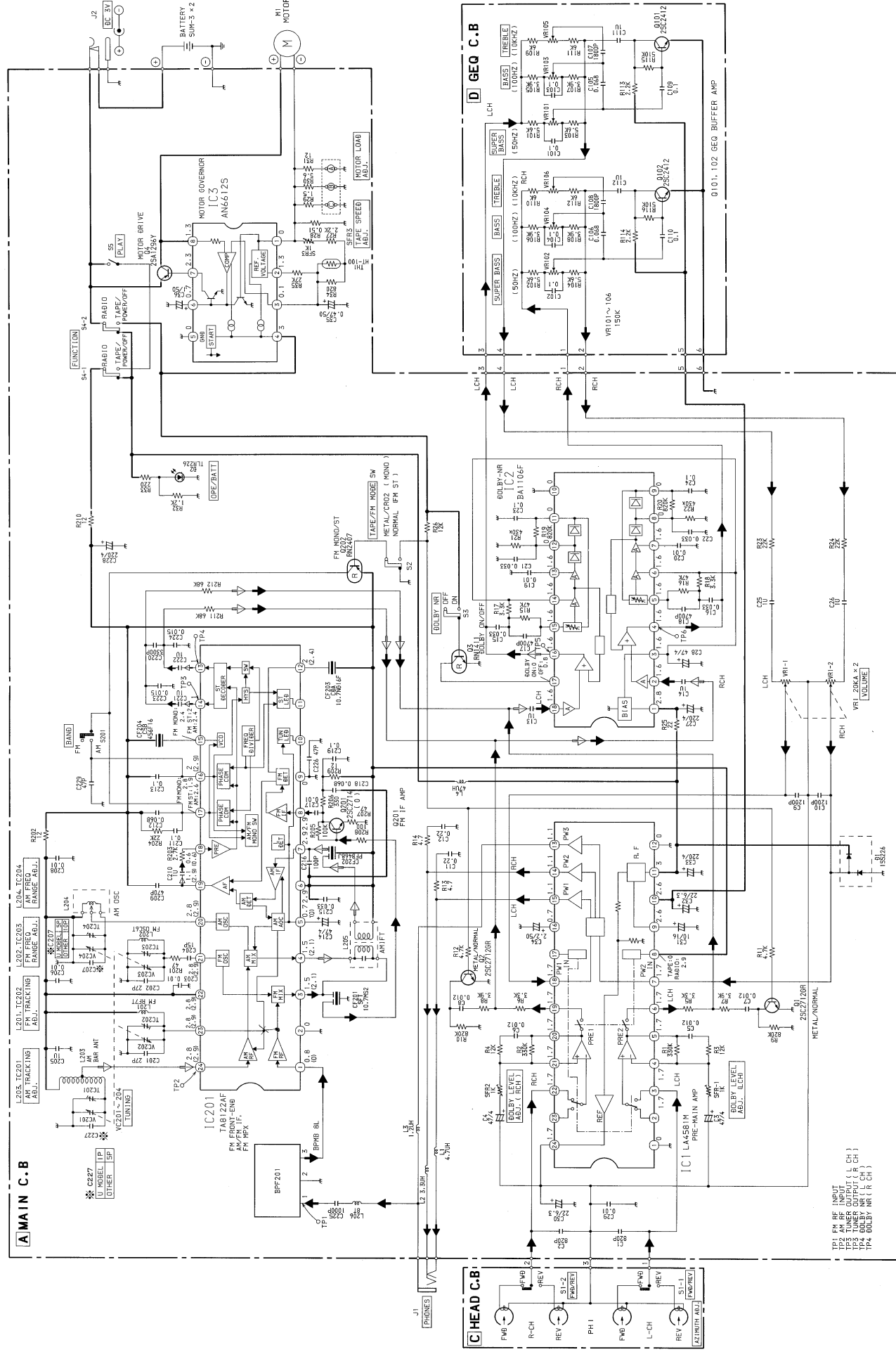
チップ抵抗
Chip resistor

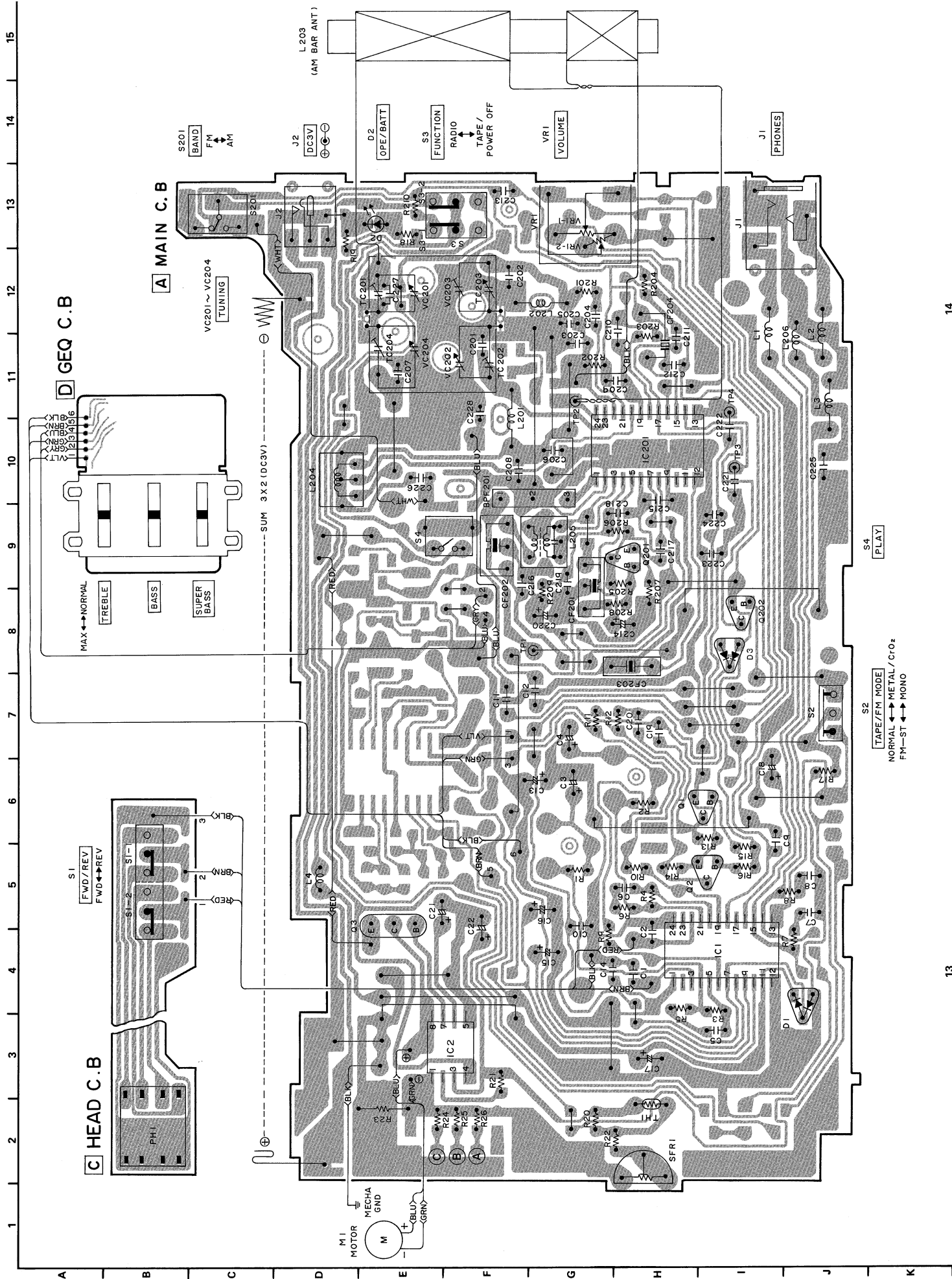
Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions/寸法(mm)			Resistor Code : A 抵抗コード : A	
				Form/外形	L	W		t
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128



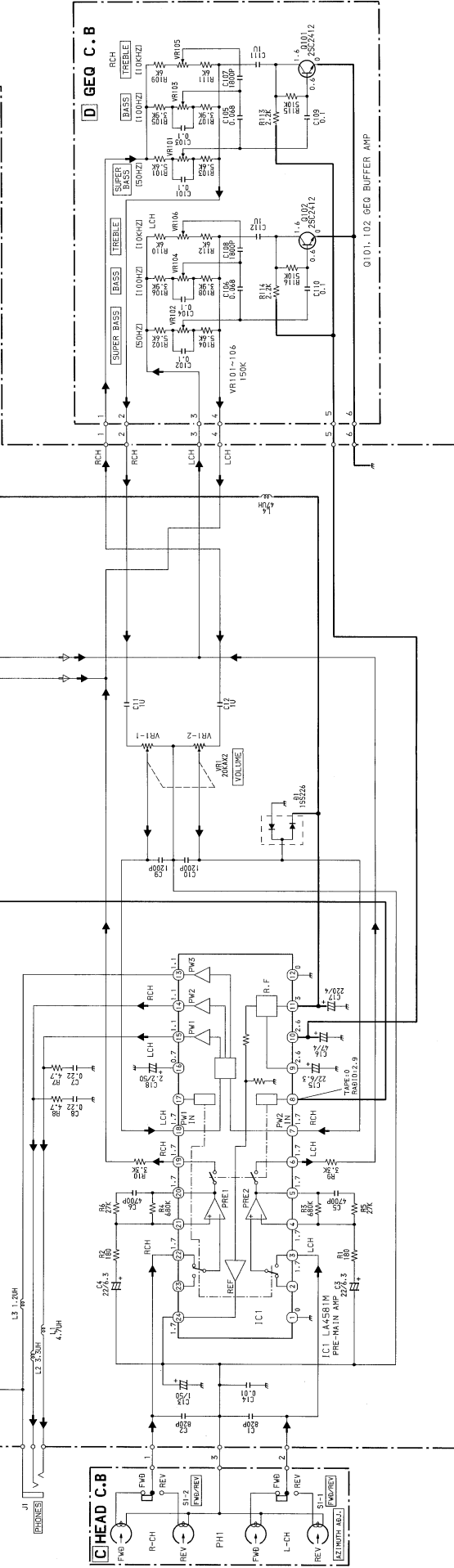
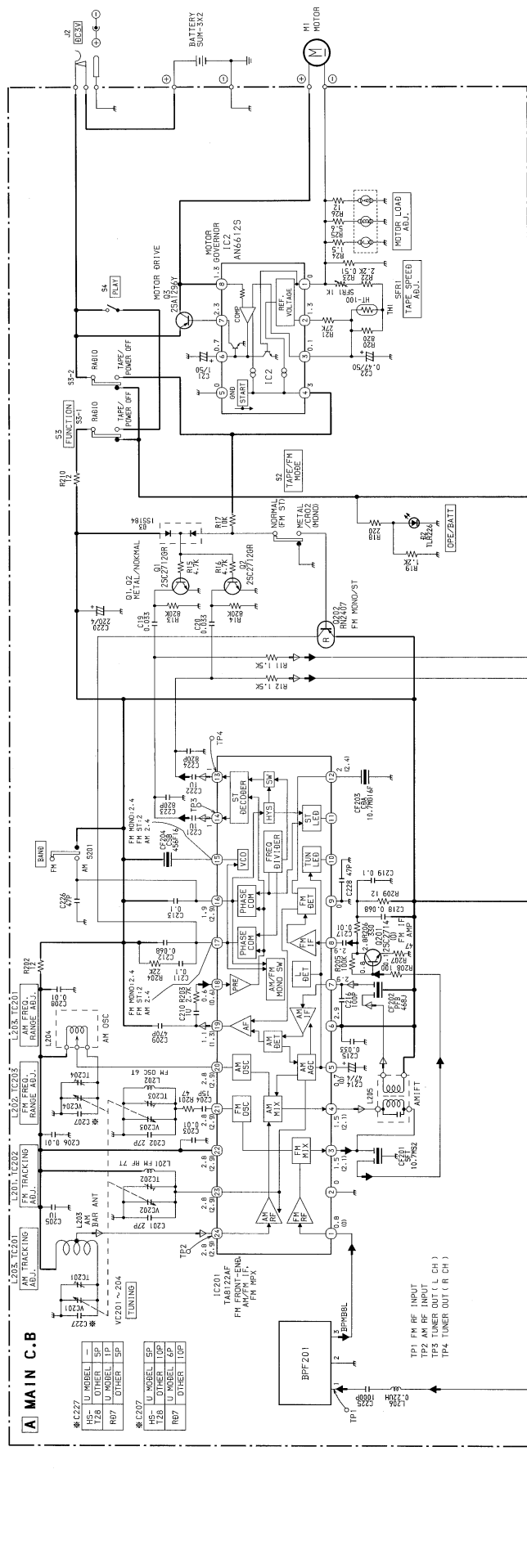




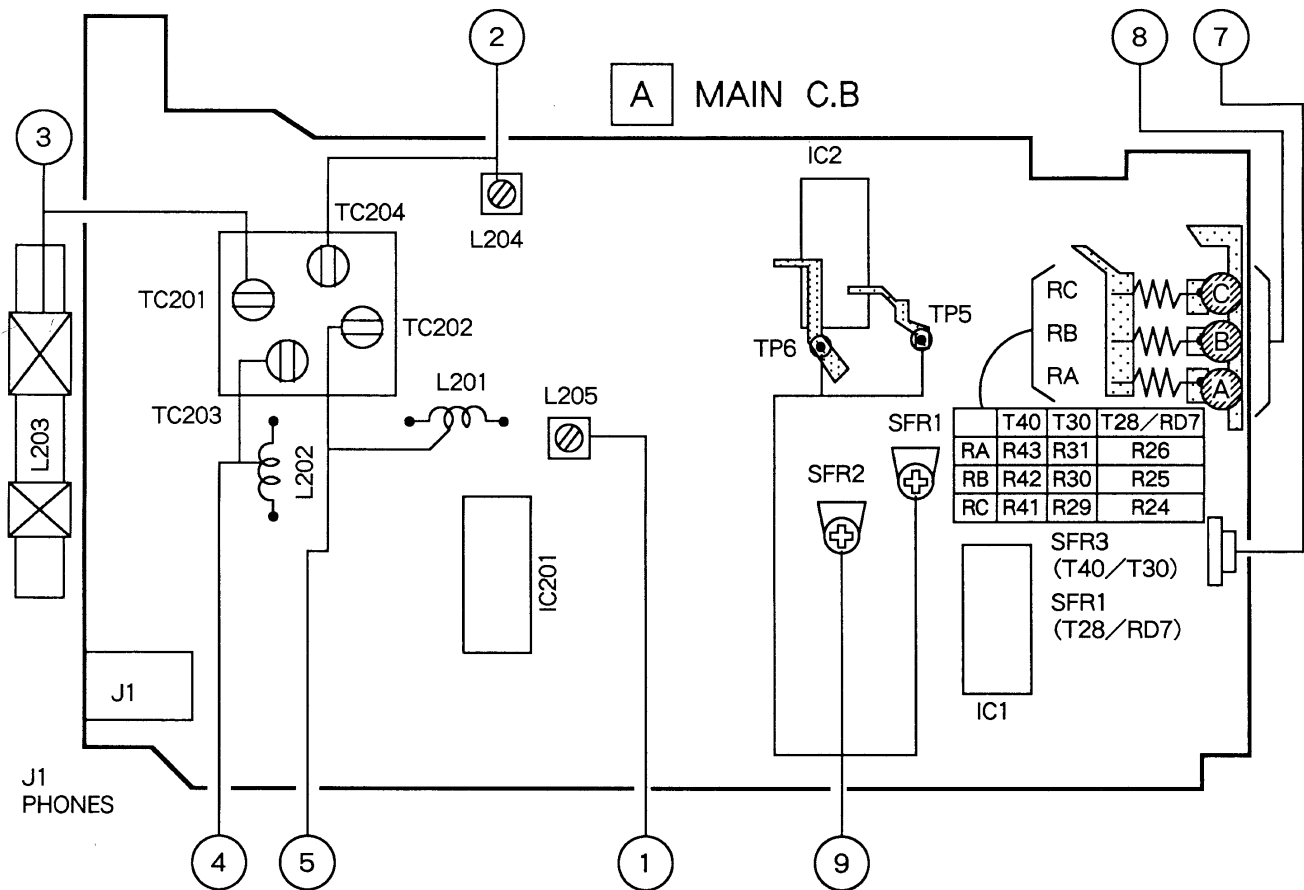




SCHEMATIC DIAGRAM - 3 (HS - T28/RD7/RD7A)



ADJUSTMENT



< RADIO SECTION >

1. AM IF Adjustment

L205 468kHz \pm 2.5kHz

2. AM Frequency Range Adjustment

L204 515kHz \pm 5kHz (Y,YZ)
 517kHz \pm 8kHz (YU)
 TC204 1650kHz \pm 20kHz (Y,YZ)
 1750kHz \pm 30kHz (YU)

3. AM Tracking Adjustment

L203 600kHz (Y,YZ)
 630kHz (YU)
 TC201 1400kHz (Y,YZ)
 1500kHz (YU)

4. FM Frequency Range Adjustment

L202 87.0MHz \pm 0.5MHz (Y,YU)
 87.4MHz \pm 0.2MHz (YZ)
 TC203 108.5MHz \pm 0.2MHz (Y,YU)
 108.5MHz \pm 0.5MHz (YZ)

5. FM Tracking Adjustment

L201 87.0MHz (Y,YU)
 87.4MHz (YZ)
 TC202 108.5MHz (Y,YU)
 108.3MHz (YZ)

< TAPE PLAYER SECTION >

6. Azimuth Adjustment

Settings :• Test tape : TTS - 320 (TTA - 113B, TCC - 152)
 • Test point : PHONES JACK (J1)
 • Adjustment location : Azimuth adjustment screw
 Method :• Play back the 8kHz signal of the test tape, and adjust so that the output becomes maximum at FWD or REV mode.

7. Tape Speed Adjustment

Settings :• Test tape : TTA - 100 (TTA - 111S)
 • Test point : PHONES JACK (J1)
 • Adjustment location : SFR1 (T28/RD7/RD7A)
 SFR3 (T40/T40A/
 T30/T30A)
 Method :• Play back the test tape, adjust for 3000Hz at FWD and \pm 45Hz at REV.

8. Motor load Adjustment

Refer to the REF NO. SI - 88 - 037 - OP of service technical information.

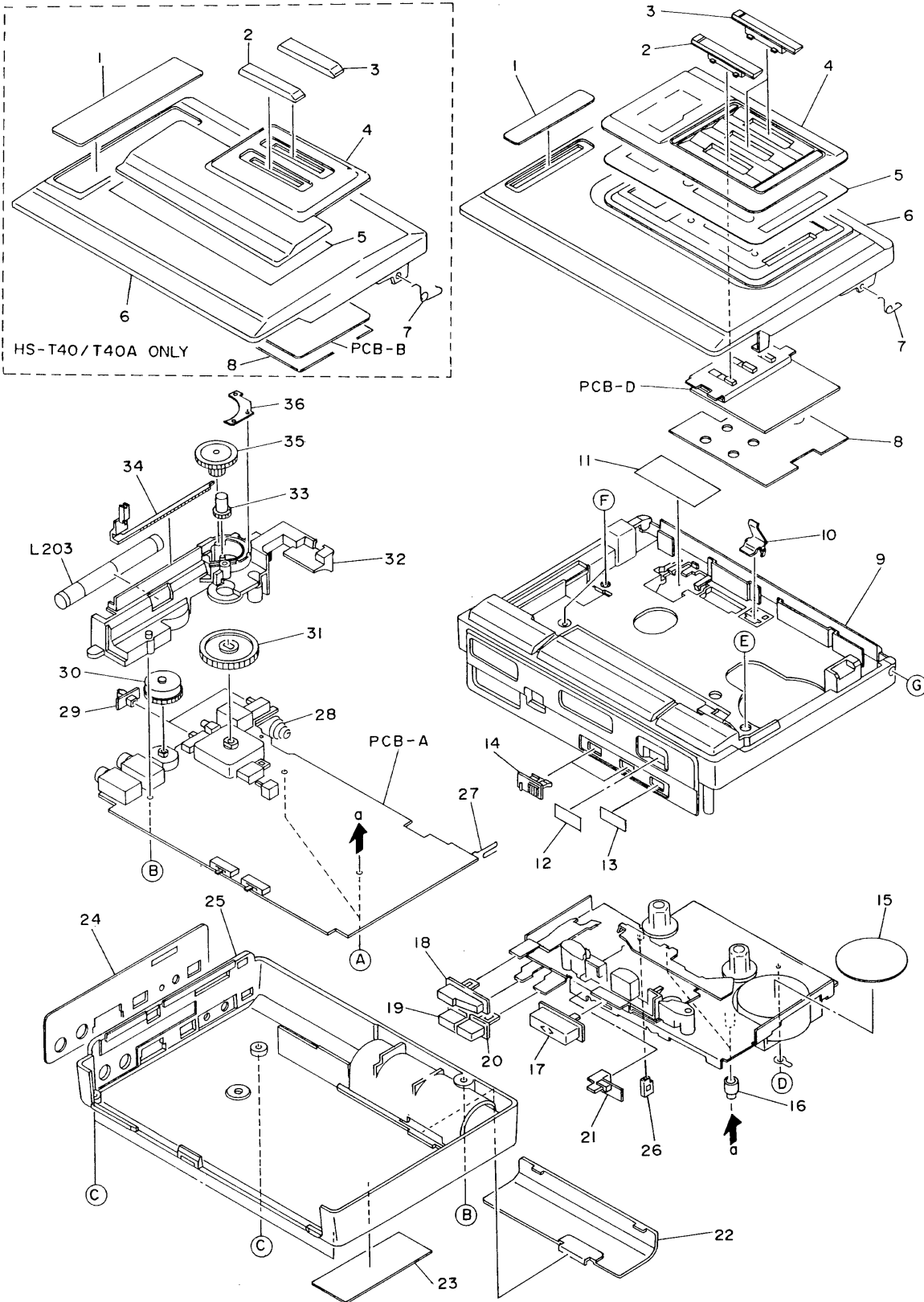
9. Dolby Level Adjustment

(HS - T40/T40A/T30/T30A ONLY)

Settings :• Test tape : TTS - 200 (TTA - 161, TCC - 130)
 • Test point : TP5 (Lch), TP6 (Rch)
 • Adjustment location : SFR1 (Lch), SFR2 (Rch)
 • DOLBY SW : OFF
 Method :• Connect an electrolytic capacitor (10 μ F / 16V) to measured equipment and TP5 (6), adjust SFR1 (2) so that the voltage at TP5 (6) is 100mV \pm 10mV.

EXPLODED VIEW - 1

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A	87-067-442-019	VT ₂ +1.7-8(B)	D	87-358-525-319	VT ₂ +1.7-2.5	G	87-067-756-019	SCREW HINGE 1.4-4 HL.
B	87-351-529-319	SCREW VT ₂ +1.7-4(B)	E	87-067-728-019	S-SCREW HINGE 1.7			
C	87-067-768-019	VT ₂ +1.7-7(B)	F	87-067-494-019	SCREW V+1.7-4			

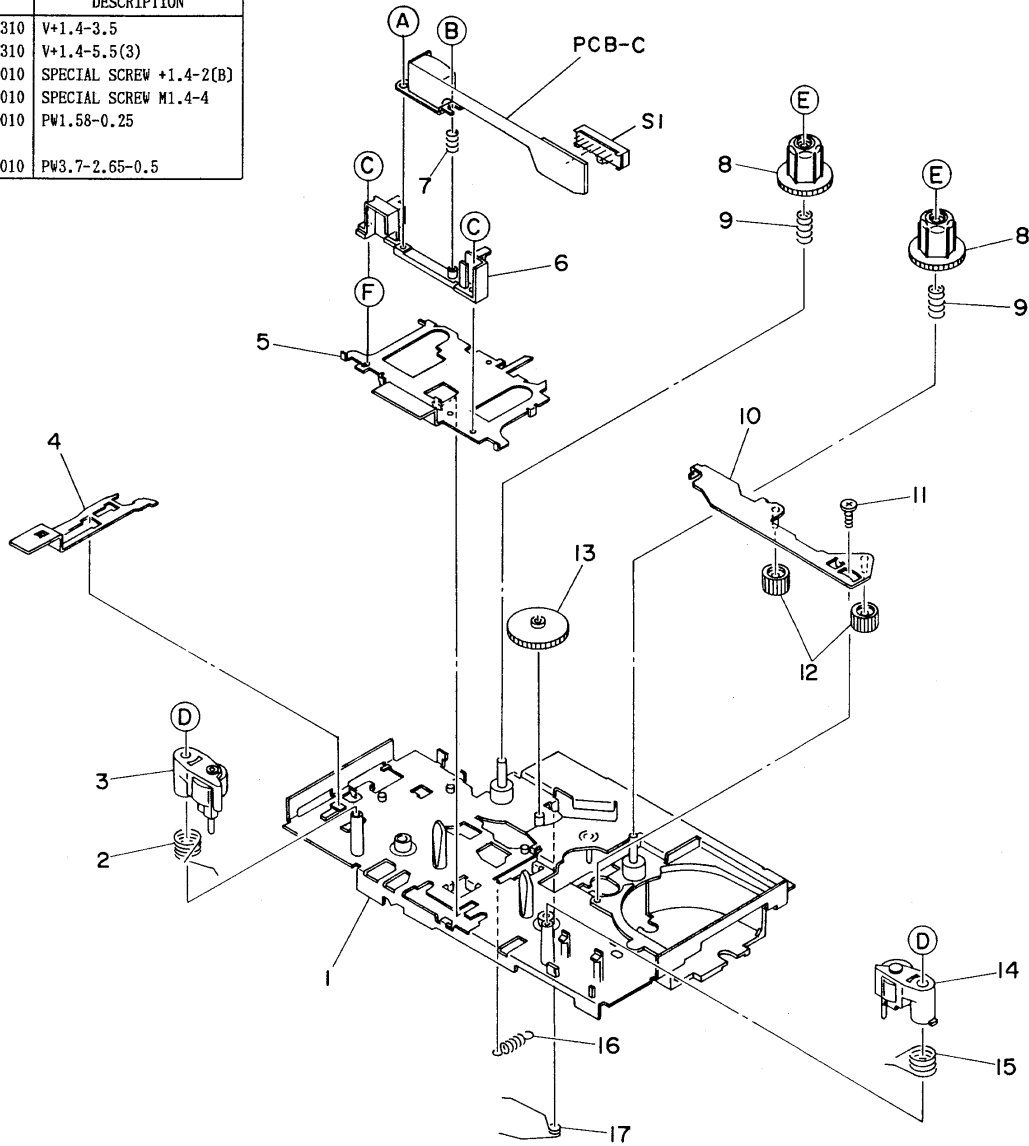


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1-1	*80-HRB-003-019	PLATE,DIAL [B] (T40)	*	1
	1-1	*80-HRB-010-019	PLATE,DIAL [B] (T40A)	*	1
	1-1	*80-HJ6-020-019	PLATE,DIAL [B] (EXCEPT T40,T40A)		1
	1-1	*80-HJ6-032-019	PLATE,DIAL [S]		1
	1-2	*80-HRB-004-019	KNOB,SLIDE C(T40,T40A)	*	1
	1-2	*80-HJ6-014-010	KNOB,SLIDE C(EXCEPT T40,T40A)		1
	1-3	*80-HRB-005-019	KNOB,SLIDE D(T40,T40A)	*	1
	1-3	*80-HJ6-024-010	KNOB,SLIDE D(EXCEPT T40,T40A)		2
	1-4	*80-HRB-002-019	WINDOW,CASSETTE(T40,T40A)	*	1
	1-4	*80-HRC-003-019	WINDOW,CASSETTE(EXCEPT T40,T40A)	*	1
	1-5	*80-HRB-201-019	ADHESIVE SHEET,WINDOW(T40,T40A)	*	1
	1-5	*80-HJ6-212-019	ADHESIVE SHEET,WINDOW (EXCEPT T40,T40A)		1
	1-6	80-HRB-001-019	LID,CASSETTE [B] (T40)	*	1
	1-6	80-HRB-014-019	LID,CASSETTE [B] (T40A)	*	1
	1-6	80-HRE-001-019	LID,CASSETTE [B] (T30)	*	1
	1-6	80-HRE-006-019	LID,CASSETTE [B] (T30A)	*	1
	1-6	80-HRC-001-019	LID,CASSETTE [B] (T28)	*	1
	1-6	80-HRE-007-019	LID,CASSETTE [S] (T30)	*	1
	1-6	80-HRC-008-019	LID,CASSETTE [S] (T28)	*	1
	1-6	80-HRF-001-019	LID,CASSETTE [S] (RD 7)	*	1
	1-6	80-HRF-004-019	LID,CASSETTE [S] (RD 7A)	*	1
	1-7	*80-HJ6-206-019	T-SPRING,CLICK		1
	1-8	*80-HRB-006-019	PLATE,PWB(T40,T40A)	*	1
	1-8	*80-HJ6-022-019	PLATE,PWB(EXCEPT T40,T40A)		1
	1-9	*80-HJ6-004-019	FRAME,CASSETTE [B]		1
	1-9	*80-HR5-014-019	FRAME,CASSETTE [S]		1
	1-10	*84-506-210-010	P-SPRING,CASSETTE PUSH		1
	1-11	*80-HR5-022-019	SHEET,FRAME		1
	1-12	80-HR5-007-019	PLATE,B [B]		1
	1-12	80-HR5-016-019	PLATE,B [S]		1
	1-13	80-HR6-010-019	PLATE,C [B] (T40,T40A,T30,T30A)		1
	1-13	80-HR5-006-019	PLATE,A [B] (T28)		1
	1-13	80-HRE-010-019	PLATE,C [S] (T30)	*	1
	1-13	80-HR5-015-019	PLATE,A [S] (T28,RD 7,RD 7A)		1
	1-14	*80-HJ6-012-019	KNOB,SLIDE A		2
	1-15	84-530-023-019	LABEL,MOTOR		1
	1-16	*80-HJ6-209-019	JOINT,PWB		2
	1-17	*80-HJ6-007-019	BUTTON,PLAY		1
	1-18	*80-HR5-004-019	BUTTON,STOP		1
	1-19	*80-HJ6-009-019	BUTTON,REW		1
	1-20	*80-HJ6-008-019	BUTTON,FF		1
	1-21	*80-HJ6-015-019	KNOB,SLIDE DIRECTION		1
	1-22	80-HJ6-005-019	LID,BATTERY [B] (EXCEPT T28)		1
	1-22	80-HJ6-005-119	LID,BATTERY [B] (T28)		1
	1-22	80-HR5-012-019	LID,BATTERY [S]		1
	1-23	*80-HRB-009-019	LABEL,SPEC(T40)	*	1
	1-23	*80-HRB-011-019	LABEL,SPEC(T40A)	*	1
	1-23	*80-HRB-013-019	LABEL,SPEC(T40,YJ)	*	1
	1-23	*80-HRE-002-019	LABEL,SPEC(T30)	*	1
	1-23	*80-HRE-005-019	LABEL,SPEC(T30A)	*	1
	1-23	*80-HRC-004-019	LABEL,SPEC(T28,Y,YZ)	*	1
	1-23	*80-HRC-007-019	LABEL,SPEC(T28,YJ1)	*	1
	1-23	*80-HRF-002-019	LABEL,SPEC(RD 7,Y,YZ)	*	1
	1-23	*80-HRF-006-019	LABEL,SPEC(RD 7A)	*	1
	1-23	*80-HRF-005-019	LABEL,SPEC(RD 7,YJ)	*	1
	1-24	*80-HRB-008-019	PLATE,CABINET [B]	*	1
	1-24	*80-HRC-009-019	PLATE,CABINET [S]	*	1
	1-25	*80-HR6-008-019	CABINET,REAR [B] (EXCEPT T28)		1
	1-25	*80-HR5-002-019	CABINET,REAR [B] (T28)		1
	1-25	*80-HRE-009-019	CABINET,REAR [S] (T30)	*	1
	1-25	*80-HR5-011-019	CABINET,REAR [S] (T28,RD 7,RD 7A)		1
	1-26	*84-504-205-019	SPACER,SW		1
	1-27	*80-HJ6-204-019	BATTERY,CONTACT +		1
	1-28	*80-HJ6-205-019	BATTERY,CONTACT -		1
	1-29	*80-HJ6-013-019	KNOB,SLIDE B		2
	1-30	*84-506-028-019	KNOB,VOLUME		1
	1-31	*80-HJ6-202-019	GEAR,A		1
	1-32	*80-HJ6-201-019	CHASSIS,TUNING		1
	1-33	*80-HJ6-203-019	GEAR,B		1
	1-34	*80-HJ6-018-119	POINTER,TUNING		1
	1-35	*80-HJ6-017-019	KNOB,ROTARY TUNING		1
	1-36	*80-HJ6-207-019	PLATE,CHASSIS		1

EXPLODED VIEW - 2

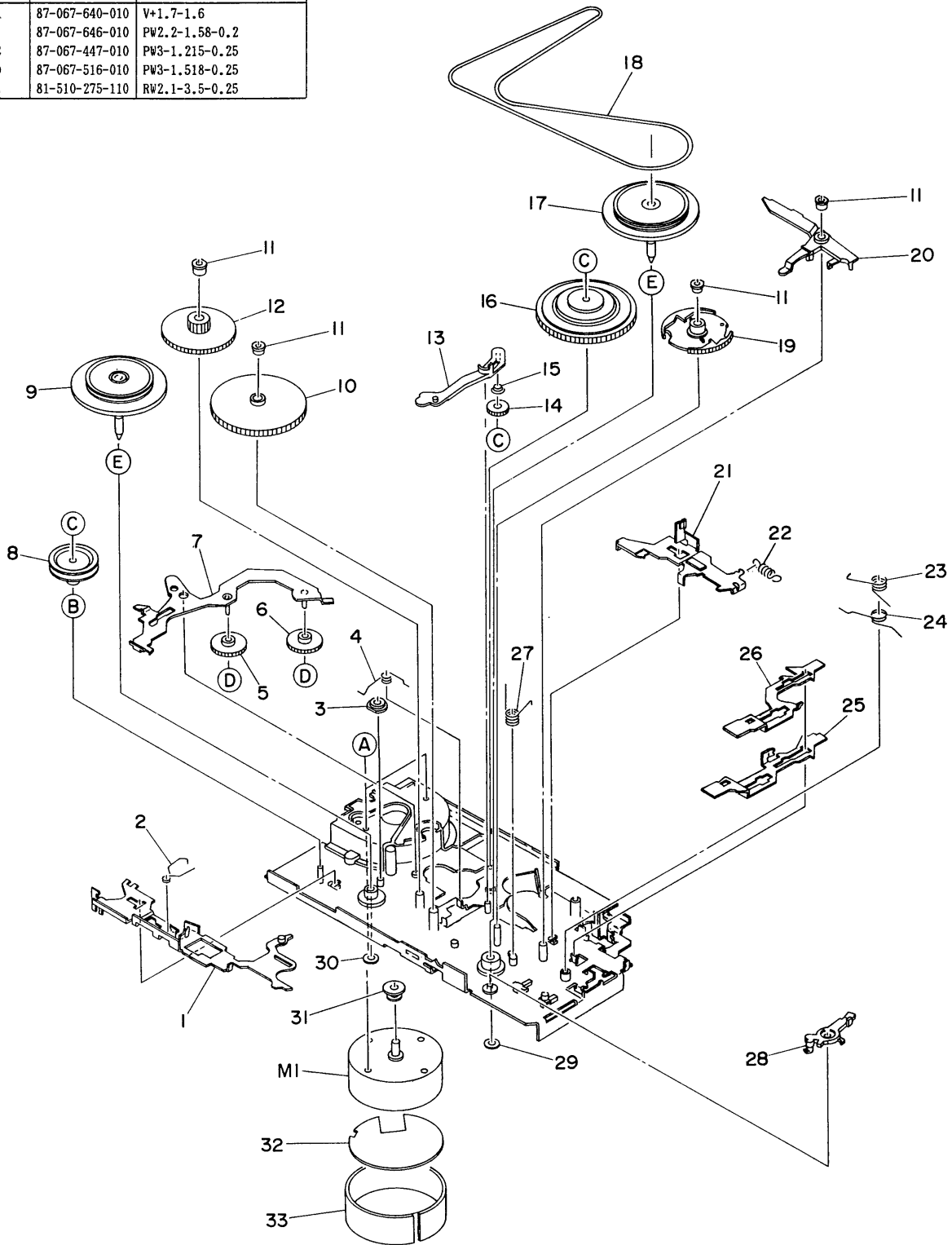
REF. NO.	PART NO.	DESCRIPTION
A	87-268-508-310	V+1.4-3.5
B	87-268-512-310	V+1.4-5.5(3)
C	87-067-511-010	SPECIAL SCREW +1.4-2(B)
D	87-067-517-010	SPECIAL SCREW M1.4-4
E	87-067-516-010	PW1.58-0.25
F	87-067-645-010	PW3.7-2.65-0.5



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	2-1	*86-567-241-110	OUTSERT ASSY P 2		1
	2-2	*86-567-231-019	T-SPRING, PINCH RP		1
	2-3	86-541-218-110	PINCH LEVER ASSY R		1
	2-4	*86-567-216-010	PLATE, BUTTON STOP		1
	2-5	*86-567-205-110	CHASSIS, SLIDE		1
	2-6	*86-541-283-110	GUIDE, TAPE		1
	2-7	*86-541-318-110	C-SPRING, AZIMUTH		1
	2-8	*86-541-236-110	GEAR, REEL PLATFORM		2
	2-9	*86-541-328-019	C-SPRING, REEL PLATFORM		2
	2-10	*86-541-221-310	PLATE FR ASSY		1
	2-11	*86-541-383-019	SCREW, FR		1
	2-12	*86-541-244-010	GEAR, FR		2
	2-13	*86-541-239-010	GEAR, REW		1
	2-14	86-541-216-110	PINCH LEVER ASSY F		1
	2-15	*86-567-230-019	T-SPRING, PINCH FP		1
	2-16	*86-541-331-010	E-SPRING, SLIDE		1
	2-17	*86-541-347-110	T-SPRING, FR LEVER		1

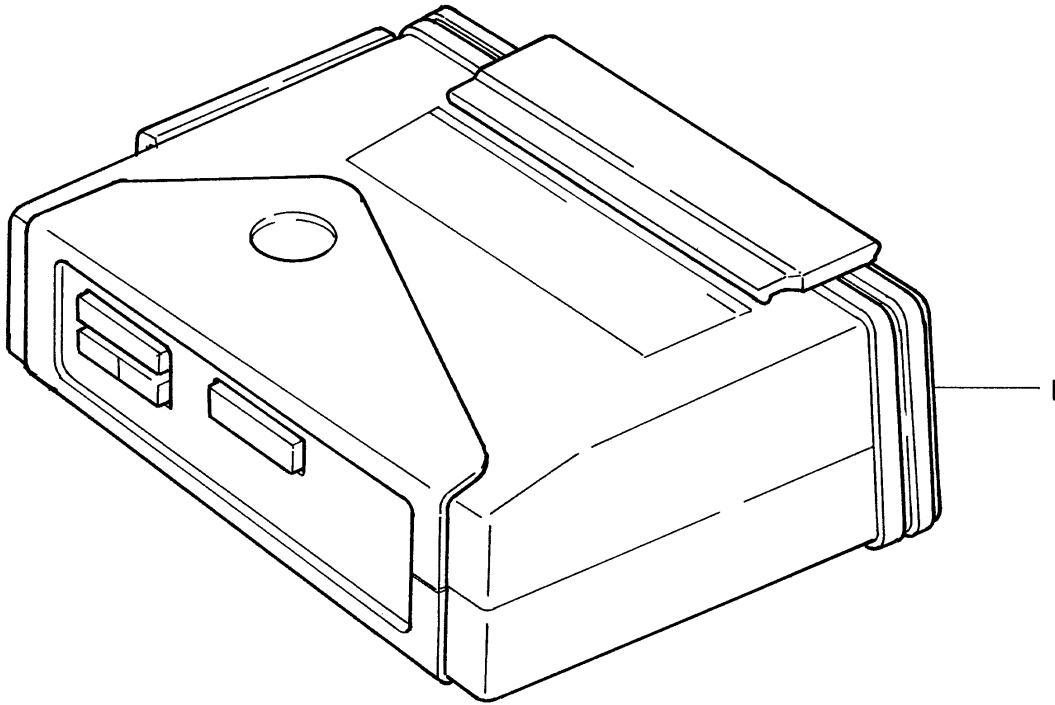
EXPLODED VIEW - 3

REF. NO.	PART NO.	DESCRIPTION
A	87-067-640-010	V+1.7-1.6
B	87-067-646-010	PW2.2-1.58-0.2
C	87-067-447-010	PW3-1.215-0.25
D	87-067-516-010	PW3-1.518-0.25
E	81-510-275-110	RW2.1-3.5-0.25



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	3-1	*86-541-222-410	PLATE PINCH SELECT ASSY		1
	3-2	*86-541-320-610	T-SPRING,PLAY LEVER		1
	3-3	*86-567-234-010	COLLAR,LV		1
	3-4	*86-541-334-210	T-SPRING,AUTO LEVER		1
	3-5	*86-541-477-110	GEAR,PLAY M		1
	3-6	*86-541-242-210	GEAR,PLAY		1
	3-7	*86-541-479-110	LEVER,PLAY ASSY M		1
	3-8	*86-541-235-110	PULLEY,RELAY B		1
	3-9	86-567-207-210	FLYWHEEL ASSY F		1
	3-10	*86-541-237-110	GEAR,AUTO CAM		1
	3-11	*86-541-376-110	COLLAR,PW-BOARD P		4
	3-12	*86-541-448-010	GEAR,SLOW-DOWN B		1
	3-13	*86-541-285-110	LEVER,AUTO		1
	3-14	*86-541-241-010	GEAR,AUTO		1
	3-15	*86-541-325-010	C-SPRING,AUTO GEAR		1
	3-16	*86-553-208-010	GEAR,CLUTCH C		1
	3-17	86-567-208-210	FLYWHEEL ASSY R		1
	3-18	86-567-221-019	BELT		1
	3-19	*86-541-249-410	GEAR,CAM P		1
	3-20	*86-541-284-310	LEVER,TRIGGER		1
	3-21	*86-567-206-010	PLATE,LOCK		1
	3-22	*86-541-332-019	E-SPRING,PLATE LOCK		1
	3-23	*86-541-349-019	T-SPRING,FR BUTTON		1
	3-24	*86-567-214-019	T-SPRING,STOP		1
	3-25	*86-567-217-110	PLATE,BUTTON FF		1
	3-26	*86-567-218-010	PLATE,BUTTON REW		1
	3-27	*86-541-345-110	T-SPRING,SELECT CAM		1
	3-28	*86-541-286-010	LEVER,DIRECTION		1
	3-29	*87-067-613-010	SHEET,SOMA 1.63-3.2-0.5		1
	3-30	*87-067-612-010	SHEET,SOMA 3-1.5-0.5		1
	3-31	*86-541-475-010	PULLEY,MOTOR M		1
	3-32	---	SHIELD,BOARD B		1
	3-33	---	SHIELD,BOARD		1

EXPLODED VIEW - 4



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	4-1	★80-HRF-951-010	CASE-RD7(RD7)	*	1

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★ 80-HRB-901-219	INSTRUCTION BOOKLET, Y	※	1
	2	★ 80-HRF-901-019	INSTRUCTION BOOKLET, Y (RD7/RD7A)	※	1
	3	★ 80-HRF-951-010	CASE - RD7 (RD7/RD7A)	※	1
	4	87-048-167-019	HP - 22BK (Y1,YJ1)		1
	5	87-048-153-019	HP - M16 (EXCEPT RD7/RD7A,Y1/YJ1)		1
	6	87-048-202-019	HP - RD7 (RD7/RD7A)		1
	7	★ 87-080-025-019	CLIP,BELT ASSY		1